——One of the most startling of Dr. Paul Albrecht's homologies or rather homo-dynamies is that which he seeks to trace between the claspers of a ray and the penis or clitoris of a mammal, bird, etc. It is, he says, the two hemipenes or claspers united, and cases of epi and hypo-spadias are atavisms. The skeleton, muscles and nerves of this organ, according to Albrecht, belong to the extremities.—— Dr. C. Hartlaub has (Zoologischen Jahrbüchern, Band 1) given the results of an investigation of the specimens of manatees in various European museums. He fully establishes the specific difference between the African *M. senegalensis* and the American *M. latirostris*, and describes for the first time the skull of the South American *M. inunguis*, a species absolutely ignored by most naturalists, but the distinctness of which he proves. The African manatee inhabits the west coast of Africa from the Senegal to the Quanza, and penetrates far into the interior up the larger rivers. The "water sheep" spoken of by Schweinfurth in the Welle, and the supposed manatee found in Lake Tchad and the Shari by Barth and others, may prove to be another species. In America the exact boundaries between *M. inunguis* and *M. latirostris* cannot be certainly stated, on account of the confusion that has hitherto existed between these forms. But it is certain that the manatee occurs from 25° N. lat. to 19° S. lat., and that that of the Antilles, Gulf of Mexico and Surinam is *M. latirostris*. *M. inunguis* is only certainly known from the Amazon and its tributaries.

PSYCHOLOGY.

THE DREAMS OF THE BLIND.—A paper read before the biological section of the American Association for the Advancement of Science was on "The Dreams of the Blind," by Dr. Joseph Jastrow. The object of the paper was to determine the extreme age at which a child may become blind and yet lose all memory of the visible world, so that it no longer sees in its dreams.

Almost all dreams of normal persons are sight-dreams, and a dream is often spoken of as a vision. The blind are deprived of this most important sense; but if they have not been born blind they may remember enough of what they have seen to enable them to imagine how things look, and when the imagination has free play in sleep to picture themselves as in full possession of all their senses. Physiologists would explain this by saying that during the years in which they saw, a certain part of the brain has become educated to receive and interpret all these messages which the eye sends, and that when this part of the brain acts spontaneously in sleep the person dreams of seeing. Such a portion of the brain would be called the sight center.

If now we find out the latest age at which blindness may set in and yet the person keep on dreaming of seeing, we will find out the time it takes for this sight center to develop. For this pur-

pose about 200 blind persons of both sexes were questioned at the institutions for the blind in Philadelphia and Baltimore, and it was found that those who became blind before their fifth year never dreamed of seeing; of those whose sight was lost between the fifth and the seventh year some did and some did not see in their dreams; while all whose eyesight was destroyed after the seventh year had quite as vivid dream-visions as seeing people. The fifth to the seventh year is thus shown to be the critical period. This period corresponds with the age which authorities assign as the limit at which a child becoming deaf will also become dumb; and also with the age of one's earliest continuous memory of oneself.

It is interesting to note that blind persons dream quite as frequently as normal people, and that with those who do not see in their dreams, hearing plays the principal part. When dreaming of home, for instance, they will hear their father's voice or their sister singing, and perhaps will feel the familiar objects in the room and thus know they are at home. We, in such a case, would see it all.

ANTHROPOLOGY.[1]

ANTHROPOMETRY, says Francis Galton, is designed to define the individual or the race, and to show in what way and to what extent, he or it differs from the others. Measurements teach the individual to know his own powers at a given time. The second important object is to keep watch over the development during the period of growth, and to give timely warning if it proceeds not normally.

The measurement of the head is designed to show how much and up to what age the brain continues to grow in bulk, especially with a view to comparing the educated with the uneducated classes.

The maximum length of the head is taken from the glabella, or the smooth spot above it, by means of calipers with blunt teeth like a comb.

The maximum width is taken with the same instrument, between the points farthest apart on the sides of the head.

The maximum height is the length of a line perpendicular to a plane passing through the ear-holes and along the lower and outer edges of the orbits.

These instruments are constructed by the Scientific Instrument Company, of Cambridge, England.

Instead of the tints of Broca and Chevreuil, Dr. Galton uses disks of glass for the color of the eyes, and spun glass of various tints for the hair. The object is to secure standards that will not fade.

A new instrument for measuring the squeeze of the hand has

[1] Edited by Prof. OTIS T. MASON, National Museum, Washington, D. C.